



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,836	07/07/2004	Lourens George Bordewijk	2001-1343	8388
<div>465                      7590                      02/20/2008</div> <div>YOUNG &amp; THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202</div>				
EXAMINER				
LUKS, JEREMY AUSTIN				
ART UNIT		PAPER NUMBER		
2837				
MAIL DATE		DELIVERY MODE		
02/20/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/500,836

**Applicant(s)**

BORDEWIJK, LOURENS GEORGE

**Examiner**

JEREMY LUKS

**Art Unit**

2837

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12, 15-19, 22-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12, 15-19, 22-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 17, 18 and 28 are objected to because they are contradictory to claims 21 and 24 from which they depend from respectively. Claims 12 and 24 require a central aperture on the outer face of the standard part, and that all elements on the outer face are in a symmetrical arrangement that a 180 degree rotation makes no cosmetic difference. Each of the objected to claims adds a switching or connecting means (not both) to the outer face, which would then make the outer face asymmetrical.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12, 15, 16, 19, 22-27 and 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambrose (4,852,177) in view of Levin (6,144,750). Ambrose teaches a hearing aid (Figure 9) to be placed in the auditory canal of a patient (Col. 3, Lines 11-13), the hearing aid comprising a standard part (Figure 6, #11) to be fitted near an outside of an auditory canal, the standard part (11) usable for both left and right ears of a patient, and enclosing a microphone (Figure 10, #15), an amplifier (Figure 11, #6), a loudspeaker (5) (Col. 3, Lines 27-30) and a battery compartment (Col. 5, Lines 45-49),

and a dedicated part (1) to be fitted in the auditory canal facing an eardrum of a patient (Col. 3, Lines 11-13), the dedicated part (1) being adapted to specific geometry of the auditory canal of the patient (Col. 2, Lines 13-18), the dedicated part being provided with sound transmission means (Figure 8, #13) for the transmission of sound from said loudspeaker (5) into the auditory canal, wherein the cross section of an outer boundary of the outer end face of the standard part (Figure 13, #11) is mirror symmetrical in outside end view (The Examiner notes that the standard part #11 in Figure 13 appears to be symmetrically oval) and all elements on an end face of the standard part being disposed in such a symmetrical arrangement that a 180 degrees rotation makes no cosmetic difference (Seen in both Figures 8 and 13), the sound transmission means (13) being adapted to the specific geometry of the auditory canal of the patient (Col. 2, Lines 26-28), and the dedicated part having a central axis forming an angle between ten degrees and forty five degrees with respect to a central axis of the standard part (See angle in Figure 12); wherein the dedicated part (1) is an internal part and the standard part (11) is an external part, and the internal part comprises a connecting part (4) connecting the internal part to the external part, and the standard part (11) accommodates all the electronics and a battery (Col. 5, Lines 45-49), the electronics comprising a microphone (15), an amplifier (6), and a loudspeaker (5) within an enclosed volume (enclosed in part #11); and wherein the dedicated part (1) is provided with means (Figure 13, #23) for removing it from the ear. Ambrose fails to teach the standard part being made of rigid plastic, and being provided with injection molded means for removing said hearing aid from the auditory canal, wherein the removing

means is a pull rod connected to the standard part housing, the standard part having an outer end face provided with a sound aperture for said microphone, said sound aperture being located in the center of the outer end face. Levin teaches a standard part (Figure 2, #30) being made of rigid plastic (Col. 3, Lines 15-20), and being provided with a pull rod (38) means connected to the standard part (30) housing for removing said hearing aid from the auditory canal (Col. 2, Lines 42-44), the standard part (30) having an outer end face provided with a sound aperture (36) for a microphone (Col. 2, Lines 44-46), said sound aperture (Figure 24, #36) being located in the center of the outer end face (outer face of plate #30). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Ambrose, with the apparatus of Levin to allow for the sound picked up by the microphone to be more evenly distributed to the center of the hearing aid. Further, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. Also, it has been held that simple substitution of one known, equivalent element (i.e. a centrally located microphone aperture) for another would have been obvious to one of ordinary skill in the art at the time of the invention to obtain predictable results. KSR International Co. v. Teleflex Inc., 82 USPQ 2d 1385 (2007). Levin fails to teach wherein the means for removing comprises an injection-molded part; however, the method of forming a device is not germane to the issue of patentability of the device itself. Therefore, this limitation has been given little patentable weight.

3. Claims 17, 18, 28 and 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Ambrose (4,852,177) in view of Levin (6,144,750) as applied to claims 12 and 24

above, and further in view of Juneau (6,228,020). Ambrose and Levin are relied upon for the reasons and disclosures set forth above. Ambrose and Levin fail to teach wherein the outer end face is provided with switching means on said one side and a connector means or adjustment facility on said one side; and wherein the microphone sound aperture is located intermediate the switch and the adjusting facility. Juneau teaches an outer end face (Figure 8, #22) provided with switching means (27) and a connector means or adjustment facility (28); and wherein a microphone sound aperture (25) is located near the switch (27) and the adjusting facility (28). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Ambrose, with the apparatus of Juneau to allow for user controlled volume adjustment, as well as the ability to connect to and communicate with a computer for programming of the hearing device. Juneau fails to teach wherein a microphone sound aperture is located intermediate the switch and the adjusting facility. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the microphone sound aperture intermediate the switch and the adjusting facility, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 12 and 15-30 have been considered but are moot in view of the new ground(s) of rejection. The Examiner affirms that the

obvious combination of Ambrose, Levin and Juneau teach all of the limitations claimed by Applicant.

5. Regarding Applicant's piecemeal analysis of the individual embodiments of Ambrose, the Examiner acknowledges that Applicant agrees that the Examiner's observations are correct. While the Examiner relies on different embodiments of Ambrose, the rejection is proper because Ambrose provides a teaching for all of the claimed elements. As pointed out by Applicant Ambrose teaches a microphone located both centrally and off-center, therefor there is a teaching to place said aperture at essentially any place on the outer face of the hearing aid, this limitation contains is merely an intended use, and a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Additionally, whether or not there is a cosmetic difference is a matter of opinion and therefore carries little patentable weight.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

7. Regarding the Levin reference, again, Applicant is arguing nonobviousness because of an intended use of Levin's apparatus. It is irrelevant whether Levin's hearing aid is a custom or standard device, so long as Levin provides a teaching for the claimed limitations, as is the case detailed in the rejection above. It is also noted that Applicant's arguments directed toward the asymmetry of Levin is also moot because the Examiner has not relied upon Levin for a teaching of symmetry. Further, the Examiner still considers the microphone aperture #36 in Figure 24 to be centrally located.

Additionally, Ambrose shows a centrally located aperture in Figures 8 and 13.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Examiner has provided sufficient motivation in accordance with *KSR International Co. v. Teleflex Inc.*, 82 USPQ 2d 1385 (2007).

9. In response to applicant's argument that Ambrose and Levin do not teach the claimed invention, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would



have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY LUKS whose telephone number is (571)272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone

Art Unit: 2837

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks  
Examiner  
Art Unit 2837  
Class 181

/Lincoln Donovan/  
Supervisory Patent Examiner, Art Unit 2837